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Before the Federal Communications Commission
Washington, D. C.

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
Office of the Secretary
45 L Street, NE
Washington, DC 20554

In the Matter of	)	
	)	
Space Bureau and Wireless Telecommunications Bureau Seek Comment on Filings of SpaceX and T-Mobile Requesting to Establish Supplemental Coverage from Space	)	Docket No. 23-135
	)	
DA 24-1193, DA 25-197, ICFS File Nos. SAT-MOD-20230207-00021 and SAT-AMD-20240322-00061, et al.	)	

COMMENTS OF THE
RADIO TECHNICAL COMMISSION FOR MARITIME SERVICES (RTCM)

Introduction

The Radio Technical Commission for Maritime Services (RTCM) is a non-profit organization whose objectives include improving marine navigation, maritime safety and search and rescue for all at sea through the appropriate use of maritime electronic navigation and radio-communications systems and practices. Initially established in 1947 to support technical decision-making in the area of maritime radiocommunications RTCM became a membership-based, non-profit 501(c)(3) organization in 1982. RTCM develops, encourages and supports needed improvements in maritime communications and electronic navigation through technical standards, studies, reports, and participation in other domestic and international technical standards and regulatory bodies.

During its seventy-eight-year history, RTCM has often engaged in spectrum-related matters on behalf of the maritime community, supporting their needs such as in collaborative technical studies and standards, preparing for and participating in International Telecommunications Union World Radio Conferences, and participating in FCC rulemakings where maritime interests are affected.

Considering RTCM's dedication to the distress and safety telecommunications needs of the maritime community, we are submitting comments to this proceeding.

Comments

RTCM Special Committee 128 Satellite Emergency Notification and Location Devices is relevant to this Proceeding

Boats and ships in U.S. waters rely on wireless mobile services when services are in range for their broadband needs as well as for 911 distress calls. In 2021, the USCG documented 3082 search and rescue (SAR) notifications by cellular phones, 13.9% of all SAR notifications received that year. The number of USCG documented SAR notifications by cellular phones has been increasing by approximately 300 notifications a year.

RTCM, recognizing the growth in the number and types of notification devices, such as cellular phones, and their potential to save many lives, if they function reliably, received support for developing a standard. In 2008, RTCM established Special Committee (SC) 128 Satellite Emergency Notification and Location Devices composed of potential users, suppliers, manufacturers, first responders, and SAR authorities to develop appropriate standards or reports addressing minimum performance requirements, technical requirements, and/or test procedures. The work of RTCM SC128 culminated in a standard that was subsequently recognized in 47 CFR 25 Subpart E.

In 2024, RTCM reactivated SC128 in light of this proceeding and of successful trials demonstrating the practicality of mobile-to-satellite connectivity for distress alerting purposes. It has begun working on a new Satellite Emergency Notification Devices (SEND) standard which would ensure reliable operation of mobile devices compatible with low earth orbiting satellite services regardless of the environment, and also ensure communications and alerts are routed to the appropriate responsible rescue authority, including U.S. Coast Guard Rescue Coordination Centers (RCCs) where appropriate. SENDs are designed to enable individuals in remote areas to alert others of an emergency situation and to aid SAR personnel in locating those in distress. The SEND function aims to notify appropriate private or public emergency response services of a distress situation and its location.

The work and goals of RTCM SC128 supports and is affected by decisions made under this proceeding.

Support for mobile to low earth orbiting satellite connectivity, without precluding similar connectivity from other satellite providers or interfering with GMDSS

As noted in previously filed comments[1], RTCM advocates for affordable broadband-capable telecommunications services for ships and boats while operating in U.S. waters where the FCC has jurisdiction. RTCM generally supports the decisions by the Commission in authorizing SpaceX and T-Mobile use of spectrum in the 1429-2690 MHz band, allowing connectivity to mobile devices, as it directly supports the work of RTCM SC128 in making reliable and effective satellite emergency notification devices available to the maritime community and to others.

While generally supporting SpaceX and T-Mobile filings in the 1429-2690 MHz band, RTCM urges the Commission to not preclude Globalstar, Iridium or other low earth orbit satellite providers similar effective access to this spectrum. Iridium's acceptance into the International Maritime Organization's recognized Global Maritime Distress and Safety System (GMDSS)[2], for example, allows its use outside U.S. waters, and provides immediate means for routing distress alerts to appropriate rescue coordination centers outside the U.S. As it noted under WT Docket 22-204, RTCM urges the Commission to institute means which best enable a variety of users to share spectrum without causing harmful interference.

Finally, in reviewing and approving applications in the 1429-2690 MHz band, RTCM urges the Commission to ensure interference is avoided to GMDSS systems operating in the 1530-1545 MHz, 1610-1646.5 MHz, and 2220-2290 MHz[3] bands.

This completes RTCM's comments for Docket No. 23-135.

Respectfully submitted,

By: */s/ E. B. Wendlandt*

Ed Wendlandt
President RTCM

[1] RTCM comments filed on WT Docket No. 22-204 in RTCM paper 2022-ARC-0002.
[2] FCC Order DA 19-1334, WT Docket No. 19-280. The GMDSS is recognized and applied under 47 CFR 80 Subpart W, and is internationally recognized by the International Telecommunications Union as well as the International Maritime Organization.
[3] NOAA uses 2226 MHz for its current GPS satellite Cospas-Sarsat downlinks.